

Promises, Promises

by PAUL SALTMAN

**It is time to articulate the promises
the university can uniquely deliver**

THERE is a crisis within the university. We face a pressing need to define and to articulate the institutional goals and purposes of the university and, having established these, to fulfill them.

A university is one environment, among many, dedicated to enlarging the intellectual and creative potential of those students and faculty who come to it committed to teaching and learning.

It is an institution that serves society by bringing to that society its powers of critical and constructive insight, in the form of its human resources and intellectual acumen, and it is dedicated to maximizing societal well-being.

As trite and trivial as these phrases may appear, if we in the university could only agree upon these fundamental goals and purposes, and demonstrate our progress toward their fulfillment, many of the traumas engendered by a lack of credibility might not exist.

Universities have been reactive rather than proactive. We are buffeted about by too many constituencies and have tried to please them all. "Student rebellion" seems to have run its course. But a far more serious rebellion and revolution is under way. I refer to the very powerful upwelling of the spirit of the counterculture. This includes not only anti-scientific and anti-technological forces, but total anti-intellectual forces as well. The need to know is replaced by the need to feel.

There are clarion cries for "relevance" from every quarter. Yet, relevance to a student is often irrelevance to a faculty member and vice versa. Research goals of one government agency may be antithetical to that of another.

Mediocrity, rather than meritocracy, has been forced upon us as our intellectual goal. I am deeply troubled by this Pass/Not Pass mentality. Excellence and adequacy are not synonymous. Why do we accept it in our institutions of education when it is unacceptable on our athle-

tic fields and in our concert halls?

The anxiety and insecurity of the Academy runs parallel to the loss of credibility of so many citizens of our society. Indeed, the university has become the most effective scapegoat to be vilified by politicians in their quest for support from their electorate.

The causes of this loss of belief or faith in the university can be directly traced to the promises made that it could not and cannot keep. Perhaps these were not explicit promises, but in their implicit nature, they could never come to pass, given the various conceptual constructs in which students, faculty, and the society operate and relate. Let me explore a few examples of unkept promises.

Some universities implied there would be jobs for all who had degrees — not just any old jobs, but careers with security, high pay, and with interesting and challenging tasks to do. Universities provide few jobs in our society. There were some who believed that universities would feed, house, entertain, teach manners, and, ultimately, perhaps find a mate for each and every young adolescent male or female who would come to them — but the students wanted "freedom" and alternative lifestyles. There were others who believed that a professorial position with a university was a lifetime sinecure to do "one's own thing" with a license to go forth and garner all extramural grants and/or consultation fees that the traffic would bear — but the monies dried up and there were many, too many, students to teach. There were some who believed that the universities were contract research "think tanks" that, for a fee, would promise to solve such problems as creating and building atomic bombs, proximity fuses, radar, cures for cancer, health care delivery for all, transportation systems for complex cities, and solutions to problems of racism — but the "academics" did not have the governmental, political, social, and economic power to

bring about such changes. Nor did they necessarily have the wisdom or knowledge.

And what is most frightening is that we continue to make promises that we cannot keep. We continue to propose functions for the university that will appeal to the populations that we serve in "innovative" fashions, much like contemporary clothing manufacturers in America who must meet the four seasons with "new styles," much ballyhoo, and little lasting import.

It is time to articulate the promises the university can, and must, uniquely deliver. We must provide an environment for education of the highest quality. Despite the diversity of man's intellectual pursuits, there is a oneness of man's intellectuality. For that oneness, that wholeness, that integrity of man's learning and seeking, the university must provide a fertile and stimulating organization.

I have never been able to grasp the idea of the various areas of man's knowledge being separated in straight-line sequences. The intellectual disciplines are linked in a circular ring. Consider biology. How can a biologist be creative without understanding the nature of chemistry, physics, mathematics, without being aware of the psychological forces which function in the central nervous system, or how humans operate through socioeconomic units or tribes, or his own concern with language and communication. Indeed, a biologist must sense the aesthetic qualities of art, music, the theater, and be able to relate them to the identical artistry and the creativity that must exist within the field of biology. No discipline can or should be dissected into a historical perspective, a moral perspective, a social perspective, or a scientific perspective. To view biology in a fractured prismatic fashion is not to be a biologist.

The university must create an environment in which given disciplines can search, act, grow, and develop within the limits of the origin, nature, and methods of their own fields of knowledge — their own epistemologies — and yet be compelled to see the significance of their interrelatedness to all other disciplines. In part, a university is a physical environment of classrooms, laboratories, libraries, computers, instruments, studios, equipment, offices, hospitals, ships, experimental agricultural plots, wilderness areas, and all manner of physical spaces and facilities that allow creative expression and search.

At the same time, there must be an integration of these spaces, places, books, computers, test tubes, and rehearsal stages. The architectural design of a university environment must relate man to nature, bring people together to exchange ideas and stimuli, and must also permit that personal privacy which each of us

requires in the acts of teaching and learning. Above all, the architecture must be flexible. It must have the ability to evolve to meet the changing needs and knowledge of a society.

The most important resources of a university are those human beings who live and work within it. A university must reach out to attract all people who are concerned, committed, creative, and intellectually dedicated, so that their collective endeavor of teaching and learning transcends the sum of their own personal abilities. Without such students, faculty, and staff, the finest physical environment in the most architecturally splendid state has no meaning.

Let us now examine the processes of teaching and learning. These two activities cannot be separated or decoupled. Light, when examined by some experiments, appears to be quantized; examined by other techniques, it appears as waves. In similar fashion, the processes of teaching and learning are two ways of looking at a single phenomenon called education.

The process of teaching has been given a great deal of rhetorical acclaim and attention but has received too little rational examination, quantification, and, above all, reward. It is time to give it the hard scrutiny and evaluation it deserves. The process of teaching takes place in many diverse settings, including lecture halls, seminars, laboratories, studios, yes, even dialogues on ends of logs, and most recently in the complex interactive computer-aided instruction. Yet the qualities of teaching excellence are universal in all of these settings. There is a hierarchical set of standards which can, and must, be applied to all of the teaching that takes place in our universities. These are set forth for examination in the hope that they will stimulate our thinking and discourse about this most important activity.

The first level of this hierarchical sequence is to measure the ability of the person or the system to communicate the facts. Our lives are filled with facts and knowing contained in small packets of information. These facts come in books, in computer tapes, stored in people's minds to be divulged orally or in graphic form. All great teachers can, and do, communicate facts. But libraries far exceed human sources in capacity and accuracy. However, without a teacher knowing facts and communicating them, teaching can never begin.

The second level of the hierarchy focuses on the teacher's ability to develop skills in the student. Skills come in various forms: the mathematical ability to manipulate numbers using the skills of addition, subtraction, multiplication, division, integration, and so forth; the physical ability to measure intervals of time, of space, of weight, of spins on electrons, of charges on

The universities must create an environment for teaching and learning about the problems that will optimize social change

protons, of the spectra of the stars and distances in light years; the literary ability to develop skills in the placing of words in sequence and in context to become poems, novels, short stories, and plays; the musical skills to bring forth pure notes from the gut of a violin, the brass of a trumpet, the sounding board of a piano, or the throat of a human and their fusion into music; and the artistic skills of two-dimensional lines drawn on paper that become three-dimensional artifacts of man's architecture, painting, sculpting, and weaving. Great teachers are themselves skilled, and above all they develop skills in their students.

The third level of the hierarchy of teaching is the ability of the teacher to communicate to the student an understanding of how we understand. Epistemology is too frequently ignored in the educational process. We communicate facts well; we even develop many skills in students. But it is rare that we develop an appreciation for the ways, and, indeed, there are many, of how to understand the nature of the universe in which we live and the value systems by which we live. There is, indeed, a unity of man's intellectual disciplines, but there is a diversity of the grounds and methodologies involved in each. The physical and biological sciences share a common epistemology. The social sciences have another common body of knowing and how one knows, which impinges on and overlaps the sciences. In the areas of the humanities, a different set of approaches is utilized. The strategies are related to, but not in any way identical with, those found in the sciences or the social sciences. Indeed, when one begins to examine how we know what we know, a true appreciation of the process of learning begins. Most crucial for good teaching is the ability of the teacher to impart to the student those strategies by which one can come to know, and find in that knowing, a richness of personal joy and satisfaction.

The fourth hierarchical level of teaching excellence is the ability to communicate and arouse in the students a sense of the joy of learning the teacher's discipline. Each of us has been touched and, thus, moved by a teacher or teachers who have brought that personal and existential sense of joy and excitement to the learning process. Often, when talking with colleagues, the use of the phrase, "joy of learning," is met with laughter and derision. There is an automatic confusion in the

meaning of the terms joy and entertainment. The joy that must be aroused has to be an active sensation — one that comes from a personal commitment and involvement; one that can be seen in an honest and un-hypocritical sense within the teacher and allowed to be experienced and encouraged on the part of the student.

The fifth level of the hierarchy of teaching excellence is manifest in the personal courage of the teacher to expose himself as one of many human models to be observed, dissected, challenged, fought, appreciated, loved, and hated by the student, and, ultimately, to be incorporated as a part of the being of the student. This is the most difficult and demanding task a teacher has. It is easy to dismiss the trivial grandstand plays of the popular teacher who arrogantly "struts his stuff" for an admiring audience of sycophants. But, it is not easy to dismiss the professor who, in knowing his discipline and in his desire to communicate that knowing, makes clear his sense of inadequacy in knowing enough, or his true modesty about knowing definitively what students should know. This is a rare courage — to manifest self in a fashion which cannot be judged "indecent exposure." The line between the obscene and beatific is, indeed, a thin one. Each of us owes a great deal to those few individuals who have been our models. The eclectic gathering of bits and pieces of those human beings who were our "teachers" has been essential to bring us together at this particular moment in time and to shape those ideas that we have to share.

The process of learning is equally important and takes place in countless settings. It is difficult to characterize learning in quite the same hierarchical way that has been applied to teaching. All great learning has related characteristics to all great teaching. There is a universality of great learning in diverse disciplines.

Great scholarship, great creativity, or great learning is initially characterized by an individual's ability to articulate the fundamental questions that must be asked as of that moment in time. All creative endeavor begins with questioning. In some respects, the asking of the question is the simplest aspect of the creative process. At the same time, it is the most complicated. For to ask profound, but unanswerable, questions and to be unable to take the next steps in the search is a sterile and futile endeavor.

The second characteristic of great scholarship is the

ability to formulate strategies for answering the questions that are raised or for communicating novel concepts and relationships through the forms of art or music. These strategies are highly complicated. They require the knowledge of facts, enormous skills, a thorough understanding of the epistemologies, and, above all, a keen awareness of all elements of human intellectuality that can be brought to bear upon the solution.

The third aspect of great learning is the ability to create and carry out that experiment, to bring to fruition that painting or statue, to write that poem or novel, to formalize that new relationship — in effect, to “do it.” Each of us knows one or more remarkable individuals who are great critics but not creators. These individuals are characterized by their ability to know the great questions and even to formulate the strategies by which their answers can be arrived at, but they never take that personal creative step themselves, to “do it.”

The fourth level in the process of learning is to hold up, for public scrutiny and review, the results of our creative acts. It is our peers in the populace who will, at best, give us constructive praise or, at worst, derisive criticism. It is here that one’s own joy of creation must frequently transcend the pain of penetrating and scathing rebuke, where the courage of self-exposure must have been developed and our sense of self-worth be manifested.

We talk of excellence, quality, greatness, and find it difficult to define them. I will not reexamine those terms here but only will reiterate that they can be sensed, understood, appreciated, and agreed to by one’s peers and superiors. What is needed, above all, is commitment to honesty when those values are examined.

But what have all of these remarks to do with the university in a contemporary society and the university’s role as an agent of social change within the society? Everything! The university cannot accept the responsibility for being an agent for change and, at the same time, maintain its integrity as an environment for teaching and learning. Once we have agreed to make change come about, we have implied that we know what that change is to be and are committed to it. We are no longer, then, free to critically examine those changes which we seek to impose upon others.

A far more successful strategy for the university is to realize and to state that we are one of many important institutions within the fabric of our society. We must interact in a positive and constructive fashion in “parauniversity” systems in which we serve, along with others, in the bringing about of social change.

Only when government, industry, civic groups, and the university combine their efforts can effective evolution be achieved.

Recently, the federal government has seized upon medical schools to become the direct instruments of health care delivery in the United States. Because the federal government has put large sums of money into the building and maintaining, as well as into the research efforts of medical schools and the training of young physicians, it has now decided to dictate educational policy within those medical schools. This is a terrible mistake. When some of the important members of the legislative government were asked why this was so, they replied, “We can get our hands on them.” In reality, health care delivery is in the hands of practicing physicians, insurance companies, governmental agencies, city, state, and federal hospitals, the myriad of individuals and collectives who in their entirety provide health care. Whether or not the government can “get their hands on them” is not the issue.

In a parallel relation, universities alone cannot bring about more effective legal practice in the United States. But they can serve as part of a much larger group that is concerned with this activity and work with those individual members of the Legislature, the Bar, the courts, and other individuals in institutions concerned with justice and delivery of health care.

Universities cannot change energy policy in the United States. Universities cannot change attitudes toward race. Universities cannot alter the structure and function of our cities. Universities cannot bring us world order. The universities can, however, and must, create an environment for teaching and learning in which human beings will examine these problems, articulate cogent questions, and offer their knowledge and insights—together with those of other individuals in other agencies—to bring about social change.

All universities depend upon the largess of private individuals or governmental agencies. How can such support be justified? In many ways, universities are subversive organizations. They probe, question, and doubt and challenge the society within and without to think and rethink its values, ethics, morals, ideas, ideals, and, above all, the nature of the universe and the role of man within it. Our future rests, in great part, upon educated, creative, and dedicated individuals who grow and develop within the university. These same individuals, in turn, must recognize their debt to the society which creates and maintains the university, and they must repay it many times over in myriads of ways so that their direct service will maximize the human potential of all of us. □